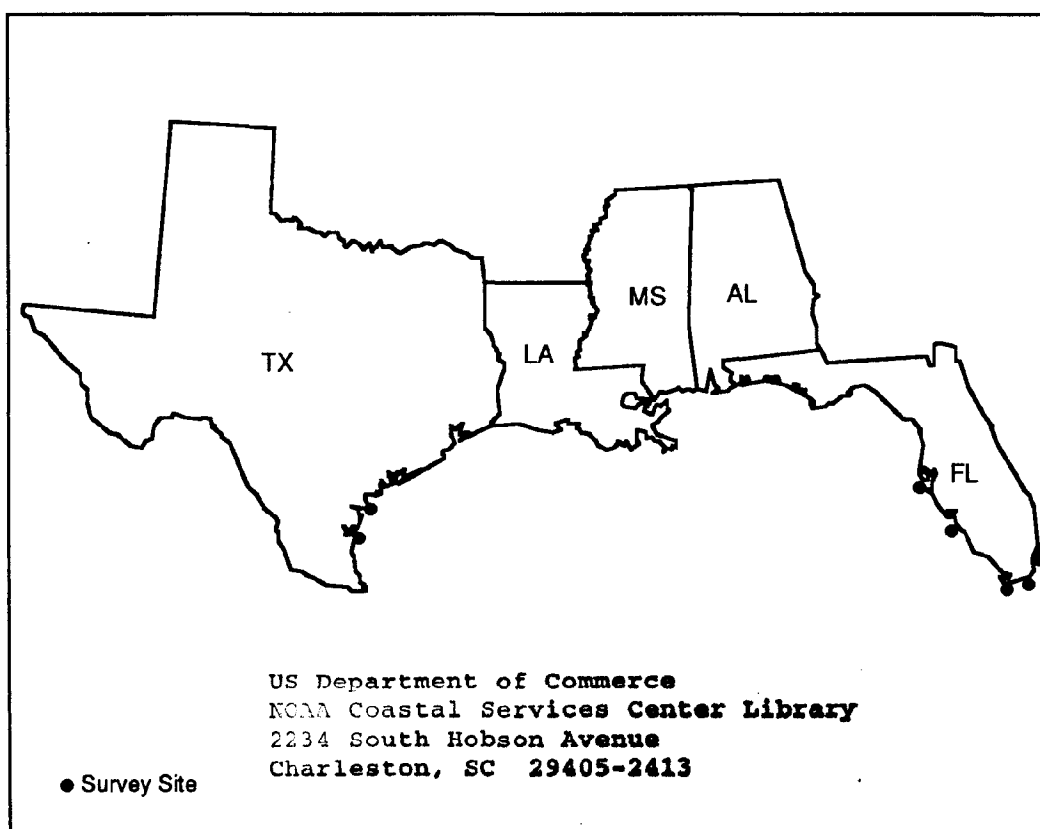

***A Socioeconomic Profile of Recreationists
at Public Outdoor Recreation
Sites in Coastal Areas: Volume 4***

Vernon R. Leeworthy and Dan Schruefer

January, 1990



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration



Coastal and Ocean Resource Economics Program

The Coastal and Ocean Resource Economics Program is an evolving set of activities to develop Nationwide data bases, products and analytical capabilities for conducting economic assessments of activities that directly affect or are affected by the health of the nation's coastal and oceanic resources. The program is conducted by the Strategic Assessments Branch (SAB) of NOAA's Office of Oceanography and Marine Assessments. It's major program elements are described below. Since 1985, the program has also co-sponsored a set of annual workshops with the Environmental Protection Agency on natural resource and environmental economics to support it's major program elements.

Inventory and Value of Coastal Recreation. Because outdoor recreation has been identified as the single largest category of benefit from the improvements in water quality, SAB began to develop a program to inventory and value coastal recreation. The first product of this program was a data base and report "Public Expenditures on Outdoor Recreation in the Coastal Areas of the U.S.A. (1986)" This led to development of an inventory of all publicly owned and/or managed recreation areas and facilities in the Nation's coastal areas. Summaries for 21 states and 25 groups of estuaries, by county and level of government, are available in a recently published atlas titled "National Estuarine Inventory, Data Atlas: Public Recreation Facilities in Coastal Areas (1988)." A complementary inventory of all privately owned and managed recreation facilities is also being developed through a cooperative agreement between NOAA and the U.S. Forest Service. Plans are to complete this inventory, Coastal Recreation Inventory, in 1992.

Public Area Recreation Visitors Survey (PARVS). PARVS is an ongoing intergovernmental cooperative research project involving seven federal and twelve state agencies. The survey was designed to provide data needed to develop highly credible and broadly comparable estimates of the economic importance of providing recreational opportunities on public lands. PARVS also enables development of detailed information about recreation uses and users and can provide estimates of the direct monetary value derived by users of public recreation areas. User values are critical to analyses of conflicts and trade-offs between recreation and other resource uses. In 1987, SAB initiated the effort to collect data at coastal recreation sites. To date, more than 15,000 interviews have been conducted at forty public outdoor recreation sites in the coastal areas of the U.S.A.

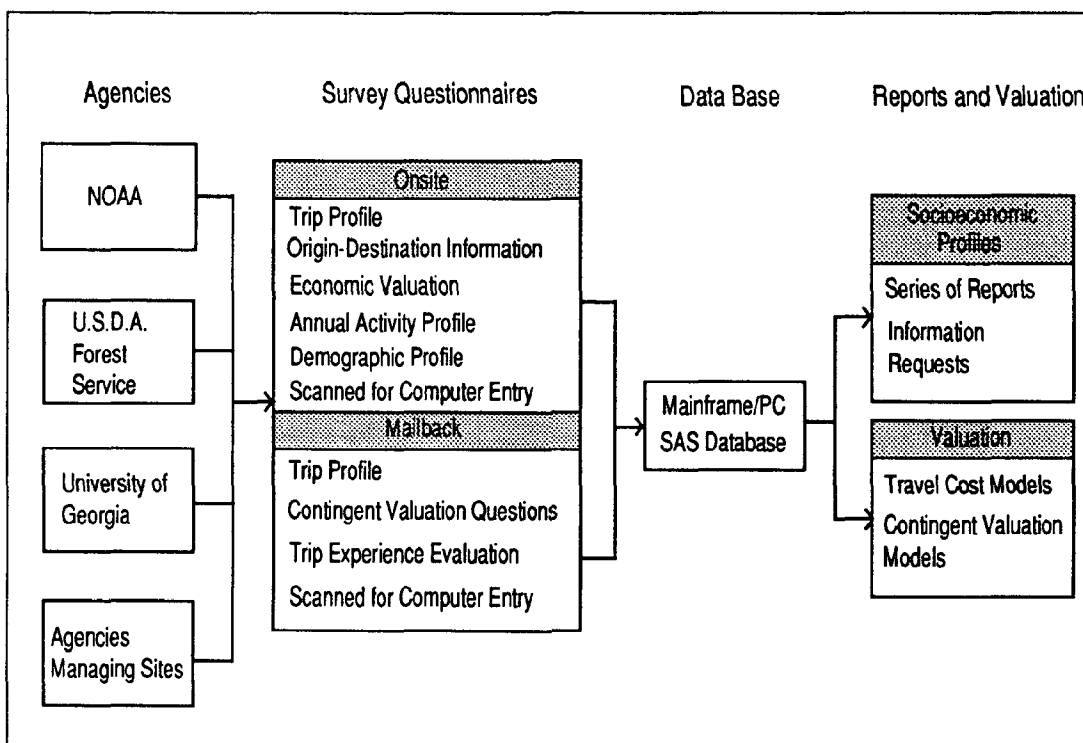
National Survey of Recreation and the Environment (NSRE). NSRE is an effort being led by NOAA and the U.S. Forest Service to update and extend a long series of national recreation surveys conducted approximately every five years from 1960 to 1982. This survey provides the only comprehensive view of the Nation's outdoor recreation activities and because of the time series of data, the only data for tracking trends in the Nation's demand for various recreational activities. Past surveys, however, have never focused on the coastal areas of the Nation. NOAA's involvement will for the first time provide a picture of how and to what extent the Nation's coastal areas are used for outdoor recreation. A broad coalition of federal and state agencies and various non-profit groups interested in recreation and environmental issues are now coming together to institute this important survey. Data collection will begin either in 1991 or 1992.

For more information on NOAA's Coastal and Oceanic Resource Economics Program, write to:

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A Socioeconomic Profile of Recreationists at Public Outdoor Recreation Sites in Coastal Areas: Volume 4

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Contents

	Page
Introduction	1
Survey Design	1
Profile of Visitors	1
Type and Extent of Activities	3
Spending by Visitors	3
Willingness-to-Pay	4
Satisfaction Ratings	5
On-going and Future Activities	5
Footnotes	6
References	6
Figures and Tables	7
Figures	
1. Recreation Sites Surveyed During the Winter-Spring 1989	8
2. U.S. Bureau of the Census Regions and Divisions of the United States	9
Tables	
1. Managing Agencies and Number of Completed Interviews for the 1989 PARVS Coastal Sites	10
2. Distribution of Visitors by Census Division or Country of Residence	11
3. Distribution of In-State and Out-of-State Visitors, by Site	12
4. Average Distance Traveled to the Six Coastal Sites	13
5. Age Distribution of All Visitors by Site, Compared to the States and the U.S.A.	14
6. Gender and Racial Composition of All Visitors by Site, Compared to the States and the U.S.A.	15
7. Distribution of All Visitors by Highest Education Level Attained, by Site	16
8. Distribution of Family Income of Visitors by Site, Compared to the States and the U.S.A.	17
9. Distribution of Visitors by Group Size	18
10. Distribution of Visitors by Group Type	19
11. Average Annual Number of Days on Site and Trips to the Site, and the Average Length of Stay on Site for the Interview Trip	20
12a. Ranking of the Top Ten Main Activities of Visitors Age 16 and Older	21

Contents (continued)

Tables (continued)	Page
12b. Ranking of the Top 15 Activities of Visitors of All Ages	22
13. Average Daily On-site Fees and Trip Expenditures Per Person	23
14. Maximum Willingness-to-Pay for an Annual Vehicle Pass for the Interview Site Versus Any Site the Agency Manages	24
15. Willingness-to-Pay Randomly Assigned Dollar Amounts - On-site Survey	25
16. Willingness-to-Pay for Annual Vehicle Pass to Site: Randomly Assigned Dollar Amounts - Mailback Survey	26
17. Satisfaction Ratings for Recreation Experience at the Site	27
18. Satisfaction Ratings- Number of Other Visitors at the Site	28
19. Satisfaction Ratings on Cleanliness of Facilities	29
20. Satisfaction Ratings on Parking	30
21. Satisfaction Ratings on Water Quality	31
22. Satisfaction Ratings on Overall Condition of the Site	32
 Appendix A: Site Profiles	 33

(List of Coastal and Ocean Resource Economics Program Publications on inside back cover.)

Introduction

This report summarizes information collected during the winter and spring of 1989 through surveys conducted at four state parks, one national park and one national seashore in Florida and Texas. Over 2,120 on-site (intercept) interviews were completed from December, 1988 to March, 1989 at the sites. An additional 943 mailback questionnaires have been completed.

Tabular summaries of the following information are contained in this report: 1) socio-demographic profiles of users; 2) type and extent of recreation activities engaged in; 3) types and amount of expenditures on recreation activities; 4) willingness-to-pay for park access; and 5) satisfaction ratings for various park attributes. Also included are detailed profiles of the six sites from the NOAA Inventory of Public Recreation Areas and Facilities in Coastal Areas. This information is intended for recreation planners and managers and business marketing agents that require simple summary information on the uses and users of coastal recreation sites.

Future reports will provide estimates of activity and site specific user values currently being developed using travel cost demand models and contingent valuation techniques.

Survey Design

Survey Questionnaires. Data collection employed two survey questionnaires: 1) an intercept (completed using a face-to-face interview); and 2) a mailback. The intercept, or on-site questionnaire, obtains information on the users and uses of the site and other information necessary for recreational demand modeling. The mailback questionnaire is used in a follow-up survey to obtain detailed information on trip-related expenditures, willingness-to-pay for park access using contingent valuation questions, and user satisfaction ratings (on a 0 to 10 scale) for several park attributes. The mailback survey also provides information necessary for estimating the importance of parks to local and regional economies.

Site Selection. Sites were selected from the NOAA Inventory of Public Recreation Areas and Facilities in Coastal Areas based on several criteria: 1) they had to be adjacent to tidal or ocean waters; 2) the sites had to have at least 100,000 visitors annually; 3) they had to have camping facilities either on-site or nearby to house interviewers; 4) the sites had to be geographically dispersed; and 5) the managing agencies had to agree to provide on-site logistical support for the interviewers. Figure 1 shows the geographic dispersion of the six

PARVS coastal sites, while Table 1 lists the managing agencies for each site. Detailed profiles of the sites are included in Appendix A.

Number of Responses. Overall, 2,121 interviews were completed on-site (intercept survey) while 943 follow-up mailbacks were received, for an overall mailback response rate of about 45 percent (Table 1). Given historical mailback response rates from PARVS, each site was targeted for at least 300-350 on-site interviews to ensure at least 100 mailback responses. The 300-350 on-site interview target was achieved at all sites. Mailback response rates were higher than the average for other coastal PARVS sites reported in Volumes 1 thru 3 of this series.

Sampling. The number of interviews at each site were stratified across various access points and time of week (weekdays versus weekends) to give proper representation of the various recreation activities available at each site. The sampling frame was a vehicle, while the sampling unit was an individual. One person was randomly selected from each randomly selected vehicle. Only those age 16 and older were interviewed. Demographic information was collected on up to eight people traveling in the vehicle. The number of people in each vehicle that participated in each activity was also collected. The mailback survey was sent to the person that was interviewed unless someone else paid for their expenses. In these cases, the person that paid expenses was identified and that person received the mailback portion of the survey.

Profile of Visitors

Information on the users of marine recreational resources, such as where they come from, how far they travel to get there, their age distribution, gender and racial composition, education levels, family incomes, group type and size are all important for assessing current and future demands for park services. These data are also used in economic impact studies to estimate the demand for other goods and services from local areas surrounding the parks.

Market Area. Home zip code, state, and county data was obtained from each person interviewed on-site. This information has been aggregated into Bureau of the Census "census divisions" to show the market areas for each of the sites (Table 2). Each of the census divisions is made up of a group of states and can be further aggregated into four census regions (Figure 2).

Three of the six sites, (Hugh Taylor Birch SRA, Honeymoon Island SRA and Goose Island SRA) draw the majority of the visitors from within the census division in which the site is located. Coral Reef State Park,

Everglades National Park and Padre Island National Seashore draw most of their visitors from outside the region where they are located. All sites have a significant proportion of foreign visitors ranging from 5.7 percent at Goose Island SRA to 15.4 percent at Everglades National Park.

For assessing local and regional economic impacts, in terms of sales, employment, income, tax revenues, and the cost of local services, it sometimes is important to know more detail about travel patterns than Table 2 provides. Table 3 shows the in-state and out-of-state distribution of visitors for each of the six sites. All of the sites, except Honeymoon Island SRA and Goose Island SRA, draw most of their visitors from outside the states where they are located. These sites are important to their states' economies because they stimulate an influx of expenditures from non-residents.

Distances Traveled to the Sites. For modeling recreational demand, it is important to know how far visitors travel to the sites. From this information, a proxy for the willingness-to-pay, or price, of site access is constructed. This is generally referred to as the "travel cost method." See Bockstael et. al. (1986) for a review of this popular method for modeling recreation demand.

One of the many issues debated in travel cost modeling is the proper specification of distance traveled. For single purpose, single-destination trips, total distance to the site, or total round trip mileage is appropriate. However, when multiple purpose or multiple destination trips are involved, total distance traveled to the site may overstate the cost of access. Information was obtained in the PARVS interviews to determine the purpose of the trip and if there were destinations other than the park visited. Additional information was also obtained on the primary purpose and destination of the trip. If other destinations were involved, the destination previous to the park where the respondents were interviewed was obtained. From this information, three distance variables were constructed (Table 4).

The first measure is unadjusted and represents the distance from where the trip was started to the park.¹ On average, visitors traveled over 855 miles one-way to the sites. The second measure is adjusted for those that visited multiple sites and for whom the park where interviewed was not the primary destination of the trip. For individuals in this category, the distance from the site visited previously to the site where the interview took place was calculated. On average, for all six sites, this yielded a one-way travel distance of only about 322 miles, or about 62 percent less than the unadjusted measure.

The second measure received another adjustment for about 13 percent of the sample; those that visited the sites while enroute home from a previously visited site. In these cases, the distance from the most efficient path home to the site where interviewed was calculated (see footnote 3, Table 4). This adjustment made only a small difference in the averages reported in Table 4. However, in individual cases the adjustments were quite large. It may, therefore, be an important element for improving the results of travel cost modeling.

Age Distribution of All Visitors. Table 5 shows the age distribution of all visitors to the six sites. The actual age of up to eight people traveling in each vehicle interviewed was obtained. Eight age groups were formed to correspond to those used by the Bureau of the Census. This allows for the comparison of age distributions across the relevant market areas (i.e., states where the sites are located). Differences between the age distributions in the general market area for each site and the age distributions of visitors of each site suggest that age may be an important factor in explaining park visitation.

Gender and Racial Composition of All Visitors. All sites, except Honeymoon Island SRA had a larger proportion of male visitors than the general population (Table 6). This suggests that gender may be an important factor in explaining park visitation. Racial composition also appears to be a significant factor. The percentage of visitors that are white is significantly higher than the general population for all six sites.

Education Levels of All Visitors. Education level may be an important factor in explaining park visitation, however, the manner in which the data is reported by the Bureau of the Census does not lend itself to direct comparison with defined market areas. It may be possible with further work on Bureau of the Census data tapes to compile comparable categories. Another important use of this information is in park planning, to the extent that park activities are education dependent. Guided tours of archaeological or historical sites or on nature trails where interpretive services are available are important examples. Table 7 summarizes the education levels of all visitors to the parks.

Family Income of Visitors. Many studies of recreational behavior have found income to be an important factor in explaining both recreational participation and avidity. Table 8 shows the distribution of family incomes of all visitors aggregated into six groups that correspond to those categories reported by the Bureau of the Census. The survey actually collects income using 12 income categories. The family incomes of park visitors at all six sites are significantly higher than the U.S. population as a whole. This lends further support for the hypothesis that income is an important determinant of park visitation.

Group Size and Type. The average group size across all sites consisted of about three people, with a high of 4.24 at Goose Island SRA and a low of 2.38 at Honeymoon Island SRA (Table 9). In addition, over 50 percent of all groups were of two or less people. Over 70 percent of all groups were family based (Table 10). These findings are significant. Schomaker and Morck (1986), in a study of group composition in advertisements for recreationally related products and services, found that family groups and groups larger than two persons were underrepresented when compared to the results of the National Recreation Survey (1977). Family groups appeared in only five percent of the ads, with an average group size of only 2.2.

Group type may also be important to park managers in addressing the issue of imposing site fees. McCurdy (1970, 1985) found that family groups, as opposed to single individuals, couples, or groups of friends most readily accepted site fees. Referendum-type contingent valuation questions on site fees, which will be discussed below, are asked as part of the PARVS survey. Thus, the capability exists to further test this proposition.

Type and Extent of Activities

Recreational Usage. In recreational demand modeling, the two most important pieces of information are a proxy for price and a measure of quantity demanded. Recreational usage information can provide information necessary to obtain both these measures. For example, in many studies the number of trips to the site represent the quantity demanded, while on-site time is used as an input in calculating a portion of the cost of the trip (e.g., total on-site plus travel time multiplied by the value of time). Both the proxy for prices and the measure of quantity demanded have varied across studies depending on the purpose and scope of the analyses. Table 11 reports the average number of days spent on-site during the past 12 months, the average number of trips to the site over the past 12 months, the average length of stay per trip (e.g., the number of days spent on-site during the trip on which the interview was conducted), and the percentage of single day trips. For all six sites, the average person made 9.94 trips to the site where interviewed, and spent an average of 12.25 days there over the past 12 months. The average length of stay for the interview trip was 2.75 days, while 59.8 percent were single day trips.

There was a good deal of variation in these measures across sites. On average, the visitors to Honeymoon Island SRA made the most trips (29.89) and spent the most days on-site (29.09) during the past 12 months, while visitors to Coral Reef State Park made both the fewest trips (1.45) and spent the fewest days on-site

over the past 12 months (3.51). The average length of stay on the interview trip was less than three days across all six sites with the highest at Padre Island National Seashore (5.90 days) and the lowest at Hugh Taylor Birch SRA (1.21 days). Over 94 percent of the visits to Hugh Taylor Birch SRA and Honeymoon Island SRA are single day visits.

Main Activities. Table 12a reports the ranking of the top ten "main" activities across all six sites and how each of these activities are ranked for each of the sites. The top ten activities are not ranked on the basis of the greatest number of participants in each activity, but by the percent of visitors, age 16 and older, that responded that a particular activity was their main activity. Sunbathing ranked number one across all sites followed by Developed Camping and Sightseeing. Only 4.5 percent across all sites did not have a main activity.

Activities of All Visitors. Table 12b reports the ranking of the top 15 activities. Activities are ranked on the basis of the greatest percent of participants from the sample of visitors of all ages. From 2,121 interviews of people 16 and older, there were 5,464 people of all ages for which activity participation was reported. Sightseeing replaces Sunbathing as the number one activity across all sites when based on total participation. Developed Camping drops to seventh overall. Sunbathing dropped to number four, while Walking rose to number two and Picnicking to number three.

Participation rate, by activity, varied greatly across sites. Sightseeing and Walking either ranked one or two at all six sites. Sunbathing ranked number one at Honeymoon Island SRA, while Developed Camping ranked number one at Goose Island SRA, with 92.9 percent of the visitors participating in the activity.

Spending by Visitors

Studies in the economics of outdoor recreation have utilized expenditures for two purposes: 1) for specifying a proxy for price when modeling the demand for recreation; and 2) for economic impact analysis where the impact of recreational activity is estimated on local and/or regional economies in terms of sales, employment, income, tax revenues, etc. It is primarily to the former purpose that NOAA intends to apply the PARVS data.

Onsite Fees. Column one of Table 13 reports the average daily on-site fees paid per person. This information was obtained from the intercept portion of the survey. On-site fees represent a portion of the total cost of accessing a site and will be used with travel costs in constructing a proxy for price in future demand modeling work. The average expenditure varied greatly

across the six sites with a high of \$25.98 per person per day at Coral Reef State Park and a low of \$1.52 per person per day at Hugh Taylor Birch SRA.

Trip Expenditures. Table 13 also reports all trip related expenditures. These expenditures include: 1) the amount spent while preparing for the trip at home, or upon return from the trip (e.g., film purchased at home in preparation for the trip and film development upon return from the trip); 2) while traveling to and from the site (e.g., expenses for lodging, food and travel); and 3) while visiting the site or immediate area (e.g., expenses for food, lodging, local travel, on-site fees, fishing bait, souvenirs, etc.). This comprehensive expenditure profile is particularly useful for analyzing the economic impact that visitors to parks have on local and/or regional economies.²

On average, total trip expenditures ranged from a high of \$840 per person at Coral Reef State Park to a low of \$238 per person at Honeymoon Island SRA.

There are several possible problems with the trip expenditures reported in Table 13. First, they are unweighted for sample response bias. Second, about 53 percent of the sample were on multiple destination trips. It is not clear whether all the expenditures made, while preparing for the trip or upon return home from the trip and while traveling to and from the site, should be considered as attributable to the site where interviewed. Future assessments of economic impact will have to address these problems.

Willingness-to-Pay

The survey used several direct approaches for measuring the willingness-of-visitors to pay site access fees. Each of these approaches utilize the contingent valuation method (CVM). Four separate questions were asked, one on the intercept questionnaire and three in the mailback survey. The question asked on the intercept survey was repeated on the mailback questionnaire.³ Two of the questions on the mailback survey were open-ended in that the maximum dollar amount the individual would pay was asked and that individual simply fills in a dollar amount. This represents the more traditional CVM approach. One question was asked on-site (repeated on mailback, see footnote 3) and one on the mailback survey using a relatively new approach which asks for "yes" or "no" responses to randomly assigned dollar amounts. This is commonly known as the referendum approach, since each person is simply asked to vote "yes" or "no" to the assigned dollar amount. This approach is thought to have several advantages over the open-ended question approach. For example, the referendum approach avoids strategic bias⁴, and is similar to market transactions where consumers either purchase or do not purchase a prod-

uct at the given market prices. The main disadvantages of this new approach is that it requires more sophisticated analyses in order to yield answers comparable to the open-ended questions and the methods of analysis are still experimental.

Open Ended Questions. Table 14 reports the results of two open-ended CVM questions on the willingness-to-pay site access fees. The first question asked what was the maximum amount the individual would be willing to pay for an annual vehicle pass that would permit access to the site for all persons in the vehicle. The pass would apply to the interview site only and would only cover site admission, not any other fees (i.e., camping). The average for all sites was \$9.50, and ranged from a high of \$17.75 at Honeymoon Island SRA, to a low of \$5.74 at Coral Reef State Park.

The second open-ended question again asked for the maximum amount the individual would be willing to pay for an annual vehicle pass, but the pass would allow admission to all sites the agency manages. It was expected that the willingness-to-pay for this type of pass would be higher than the pass that allows access to only one site, since it is expected that the option to visit additional sites may have some value. Although the means are lower at all sites for the one site pass, the differences are statistically insignificant only at Hugh Taylor Birch SRA and Honeymoon Island SRA.

The results presented here are only preliminary since several issues in analyzing the data are as yet unresolved. The estimates in Table 14 are unweighted for mailback response bias and neither an analysis of protest bids (i.e., zero bids given because they do not like the idea of fees) nor an analysis of anchoring bias (caused by placing the referendum question before the open-ended question) have been conducted. In the latter case, the true maximum amount may not have been given because the individual may be biasing their bid toward the randomly assigned dollar amount asked in the referendum question. These issues are currently being researched.

Referendum Questions. Table 15 presents the percentage of yes votes for each of the ten randomly assigned per-person per-day charges for site admission that was asked on the intercept questionnaire. As expected, the percent of yes votes generally decline at higher dollar amounts. There are several inconsistencies where a higher percent of "yes" responses occur at higher dollar amounts. When aggregated across all six sites these inconsistencies disappear, suggesting relatively large sample sizes may be required to achieve consistent results with this method. An overwhelming majority would be willing to pay at least \$2.00 per person per day at all sites except Coral Reef State Park and Honeymoon Island SRA.

Another referendum question was asked on the mail-back portion of the survey. This question asks for the willingness-to-pay for an annual vehicle pass to the site where interviewed. This pass would admit everyone in the vehicle. Again, as expected, the percent of yes votes declines with increased dollar amounts with few exceptions (Table 16).

Satisfaction Ratings

The final section of the mailback survey asks visitors to rate their satisfaction with the site for six attributes on a scale from 0 to 10. The six attributes are: 1) the recreation experience at the site (Table 17); 2) the number of other visitors at the site (Table 18); 3) cleanliness of facilities (Table 19); 4) parking (Table 20); 5) water quality (Table 21); and 6) overall condition of the site (Table 22).

Recreation Experience. The mean ratings ranged from a low of 7.13 at Honeymoon Island SRA to a high of 8.00 at Coral Reef State Park. At least 51 percent of the visitors to all six sites gave a rating of eight or above.

Number of Visitors. This attribute is intended as an indicator of individuals perception of crowding conditions on their satisfaction. This attribute received the lowest rating across all sites. The mean scores ranged from 5.78 at Honeymoon Island SRA to 8.37 at Hugh Taylor Birch SRA.

Cleanliness of Facilities. This attribute generally received high ratings across all sites. The lowest rating was at Padre Island National Seashore (7.30). Goose Island SRA had the highest rating (8.47), with over 43 percent giving a rating of 9 or above.

Parking. This attribute overall received the highest rating. This would seem to conflict with the ratings given on the number of other visitors. Goose Island SRA had the highest rating (8.92), with over 66 percent giving a rating of 9 or above.

Water Quality. Average water quality ratings varied from a low of 6.90 at Padre Island National Seashore to a high of 8.02 at Goose Island SRA. At least 35 percent of the visitors at all six sites gave a rating of nine or above.

Overall Conditions of the Site. Most visitors were generally pleased with the overall condition of the sites. The average ratings ranged from a low of 7.00 at Honeymoon Island SRA to a high of 8.58 at Goose Island SRA. Over 55 percent at Goose Island SRA gave a rating of 9 or above.

On-Going and Future Activities

Data Collection. During the summer of 1989, 10 sites were surveyed on the West Coast of the U.S. from California to Washington. In the summer of 1990, 7 to 10 local-urban sites will be surveyed throughout the U.S. At the completion of the 1990 season, the coastal portion of PARVS will include information on 50 sites and contain survey data on over 15,000 visitors to coastal recreation sites across the nation.

Consideration is being given to whether PARVS could be extended to include other types of sites such as wildlife refuges, hunting/game management areas and nature preserves. This would provide the capability to develop a more comprehensive set of activity and site specific user day values for coastal recreation.

Estimation of User Day Values. Researchers at SAB and North Carolina State University are currently developing travel cost demand models and contingent valuation methods using the data summarized in this report. These methods will be assessed for their ability to produce consistent and credible estimates of activity and site specific user day values.

Once accepted, these methods will be applied to the data collected at the remaining forty sites around the Nation. The result will be a National set of user day values developed with a consistent set of data and methodologies.

Site Valuation. For many policy and management decisions, it is important to know the total annual value generated by a site. Here user day values must be aggregated. Estimates of total site use by activity are required. Updates of total annual site visitation are being compiled for all sites surveyed (See Appendix A for site visitation for 1984, 1982, 1977 and 1972 from NOAA Inventory of Recreation Areas and Facilities) in cooperation with the state and federal agencies managing the site.

Changes in Site Qualities. Total loss of a site is more rare than small, sometimes continuous changes in site qualities. Degradation of the site by water and air pollution and debris washed-up on shorelines result in losses in site value due to losses in user day values and lower visitation rates. Future research efforts will attempt to model (in a broad regional or National context) the losses in site values due to reductions in site qualities. The major focus will be on water quality.

Total Value of Coastal Recreation. A much more ambitious goal of the SAB program is to place a total annual value on all coastal recreation sites. To accom-

plish this, estimates of total coastal recreational use are required. Very little information currently exists.

To remedy this, SAB will be working with the U.S.D.A. Forest Service and the National Park Service in modifying the 1991 National Recreation Survey to obtain total use estimates for coastal recreation. Although sample sizes will be too small to provide more than broad regional estimates of use, the study combined with PARVS data and analysis will provide the capability to provide regional and National estimates of the total value of coastal recreation.

Footnotes

1. The respondent was asked how many miles they traveled from where they started their trip to the site. As an alternative we used the highway mileage calculated using a micro-computer based software program called "Highways and Byways" by New Direction Software, Inc. A comparison of the mileages provided by the respondent and that calculated from the computer program revealed that the absolute value of the differences increased with the total distance traveled. Many include mileage associated with the side trips. The mileage reported in Table 4 is from the Hyways and Byways computer program.

2. The U.S. Forest Service has developed an analytic capability for assessing economic impacts called "Implan". Implan provides planning analysts with the capability to construct a local and/or regional input-output model for any applicable area and to perform evaluations of potential economic effects of alternative courses of action. See Cordell et. al. (1987) for an example.

3. The on-site referendum question was repeated on the mailback because recent evidence from research being conducted at the University of Colorado, at Boulder, suggests that people may change their bids after they have had more time to think about the decision. The results of this repeat of the question are not reported here. Future analysis of this data will test for this effect.

4. The overstatement of willingness-to-pay when it is perceived that the fee will not be charged but will lead to park protection or improvement, or understatement if it is perceived management is planning to impose fees but the individual is reasonably sure the park will be protected. See Desvousges et. al. (1983) for a discussion of biases.

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List of Figures and Tables*

Figures

1. Recreation Sites Surveyed During the Winter-Spring 1989.
2. U.S. Bureau of the Census Regions and Divisions of the United States.

Tables

1. Managing Agencies and Number of Completed Interviews for the 1989 PARVS Coastal Sites.
2. Distribution of Visitors by Census Division or Country of Residence.
3. Distribution of In-State and Out-of-State Visitors, by Site.
4. Average Distance Traveled to the Six Coastal Sites.
5. Age Distribution of All Visitors by Site, Compared to the States and the U.S.A.
6. Gender and Racial Composition of All Visitors by Site, Compared to the States and the U.S.A.
7. Distribution of All Visitors by Highest Education Level Attained, by Site.
8. Distribution of Family Income of Visitors by Site, Compared to the States and the U.S.A.
9. Distribution of Visitors by Group Size.
10. Distribution of Visitors by Group Type.
11. Average Annual Number of Days on Site and Trips to the Site, and the Average Length of Stay on Site for the Interview Trip.
12. A) Ranking of the Top Ten Main Activities of Visitors Age 16 and Older.
B) Ranking of the Top 15 Activities of Visitors of All Ages.
13. Average Daily On-site Fees and Trip Expenditures Per Person.
14. Maximum Willingness-to-Pay for an Annual Vehicle Pass for the Interview Site Versus Any Site the Agency Manages.
15. Willingness-to-Pay Randomly Assigned Dollar Amounts, On-site Survey.
16. Willingness-to-Pay for Annual Vehicle Pass to Site: Randomly Assigned Dollar Amounts - Mailback Survey.
17. Satisfaction Ratings for Recreation Experience at the Site.
18. Satisfaction Ratings-Number of Other Visitors at the Site.
19. Satisfaction Ratings on Cleanliness of Facilities.
20. Satisfaction Ratings on Parking.
21. Satisfaction Ratings on Water Quality.
22. Satisfaction Ratings on Overall Condition of the Site.

Figure 1. Recreation Sites Surveyed During the Winter-Spring 1989.

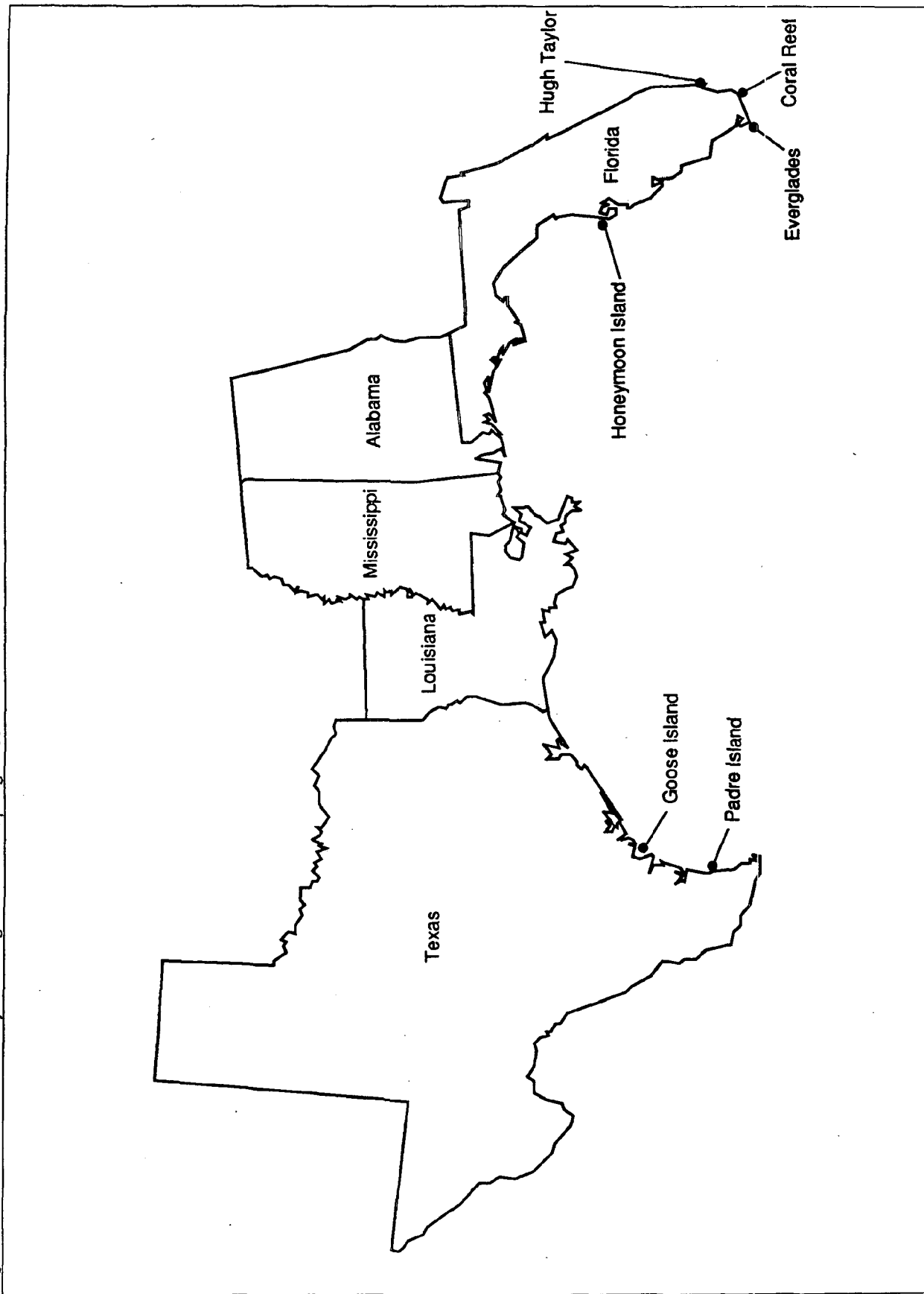


Figure 2. U.S. Bureau of the Census Regions and Divisions of the United States.

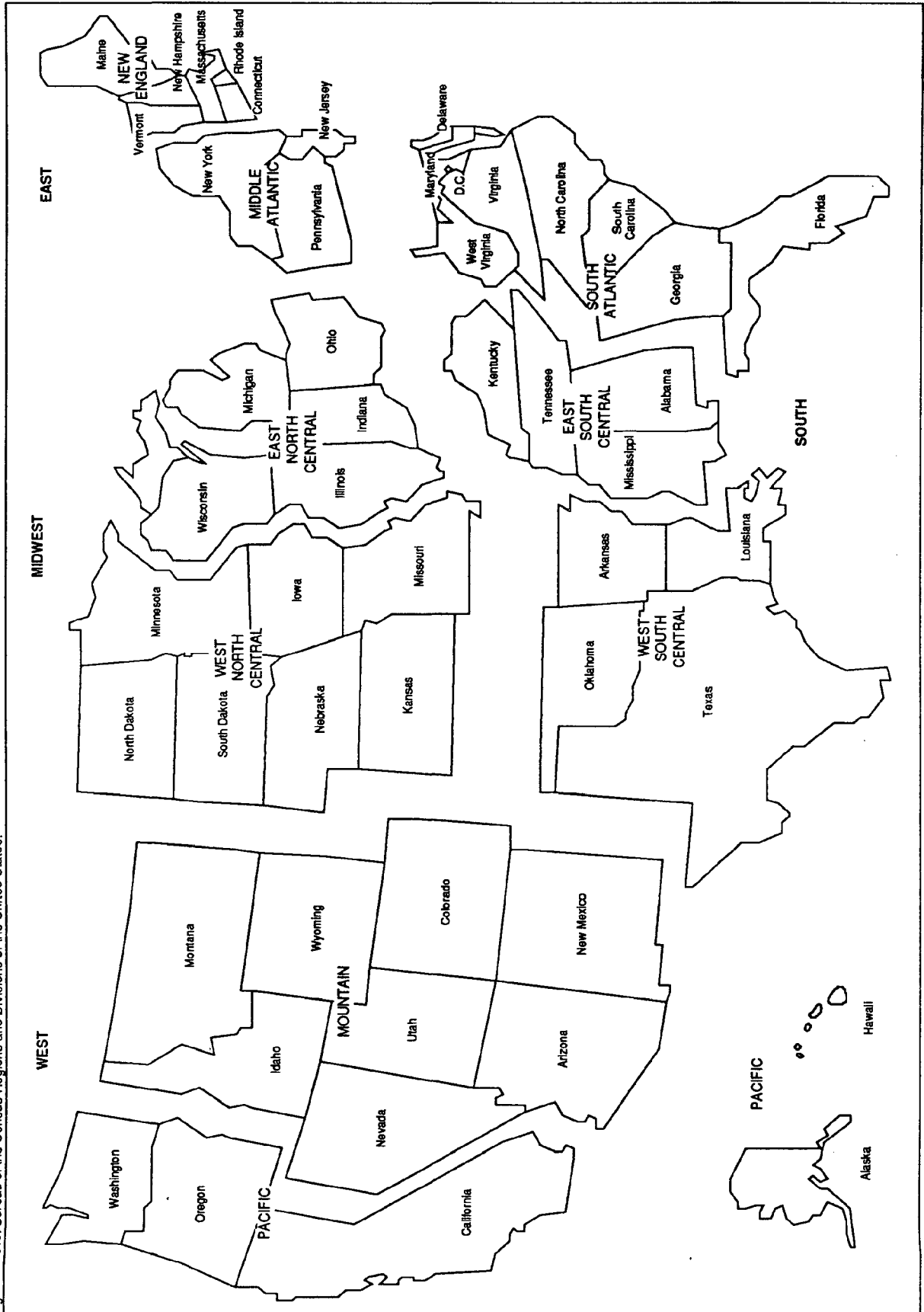


Table 1. Managing Agencies and Number of Completed Interviews for the 1989 PARVS Coastal Sites

State/Site	Managing Agency	Number of Interviews	
		On-site	Mailback
Florida			
Hugh Taylor Birch State Recreation Area (SRA)	FL Dept. of Natural Resources, Div. of Recreation and Parks	369	125
Coral Reef State Park	"	350	187
Honeymoon Island State Recreation Area (SRA)	"	348	155
Everglades National Park	National Park Service	371	184
Texas			
Goose Island State Recreation Area (SRA)	TX Parks and Wildlife Dept.	334	156
Padre Island National Seashore	National Park Service	349	136
All Sites		2,121	943

Table 2. Distribution of Visitors by Census Division or Country of Residence*

Census Division - Country	Sites (Percent)						
	All Sites	Hugh Taylor Birch SRA	Coral Reef State Park	Honeymoon Island SRA	Everglades National Park	Goose Island SRA	Padre Island National Seashore
New England	5.8	7.3	8.6	4.3	9.2	0.9	3.8
Middle Atlantic	9.8	14.6	19.4	8.6	10.8	2.4	2.3
South Atlantic	32.1	50.4	34.0	66.1	34.2	2.1	2.9
East North Central	12.4	8.9	12.9	8.3	16.2	12.3	15.7
East South Central	2.0	2.2	2.9	0.9	3.2	2.1	0.6
West North Central	5.7	2.2	4.0	3.2	4.0	9.3	11.9
West South Central	16.8	0.5	1.1	0.3	2.2	59.0	41.4
Mountain	2.9	0.3	1.4	0.3	2.7	3.3	9.6
Pacific	2.2	0.8	1.4	0.6	2.2	3.0	5.2
Canada	6.5	10.3	9.4	4.9	4.6	5.4	4.1
All Other Foreign	4.0	2.4	4.9	2.6	10.8	0.3	2.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

*Toned areas show Census Division within which the site is located.

Table 3. Distribution of In-State and Out-of-State Visitors, By Site

State/Site	Visitors (Percent)	
	In-State	Out-of State
Florida		
Hugh Taylor Birch SRA	46.6	53.4
Coral Reef State Park	24.3	75.7
Honeymoon Island SRA	61.2	38.8
Everglades National Park	26.1	73.9
Texas		
Goose Island SRA	56.3	43.7
Padre Island National Seashore	38.6	61.4

Table 4. Average Distance Traveled to the Six Coastal Sites

State/Site	Average Miles to Site			From Most Efficient Path Home ³
	From Where Started Trip ¹	From Site Previously Visited ²		
Florida				
Hugh Taylor Birch SRA	574	318		312
Coral Reef State Park	1,276	413		403
Honeymoon Island SRA	216	154		153
Everglades National Park	1,346	279		268
Texas				
Goose Island SRA	697	217		198
Padre Island National Seashore	1,006	551		532
All Sites	855	322		311

¹Most people (90%) started the trip from their home, so for the majority, this represents the distance from their home to the site.

²About 53 percent of the sample were on trips where they visited multiple sites. Of these, about 80 percent (i.e., 42 percent of the entire sample) did not designate the site (where they were interviewed) as their primary destination. For those that visited other sites and the site of interview was not the primary destination, the distance from the site visited previously to the site of the interview was calculated.

³About 13 percent of the sample stopped at the site of the interview while enroute home. In these cases, the distance of the most efficient path home was calculated. For example, those who may have visited Key West, FL and who live in New York, NY would (it is assumed) be traveling on U.S. 1. If they decided to stop at Coral Reef State Park (north of Key Largo), the mileage from U.S. 1 to Coral Reef State Park was calculated. In most cases this had little effect on the means, however, they may play a greater role in travel cost modeling, where individual differences were sometimes great.

Table 5. Age Distribution of All Visitors by Site, Compared to the States and the U.S.A.

State/Site	Age Group (Percent)							
	<15	15-19	20-24	25-34	35-44	45-54	55-64	65>
Florida	19	7	8	15	12	10	12	17
Hugh Taylor Birch SRA	12	6	11	19	15	10	15	12
Coral Reef State Park	12	3	7	17	16	13	20	12
Honeymoon Island SRA	16	3	2	13	16	10	20	20
Everglades National Park	8	2	6	17	15	13	22	17
Texas	24	8	10	19	13	9	8	9
Goose Island SRA	19	4	3	13	11	12	17	21
Padre Island National Seashore	15	4	5	22	15	10	15	14
All Sites	14	3	6	17	15	11	18	16
South Atlantic	21	8	9	17	13	10	10	12
West South Central	24	8	9	18	13	9	8	10
East North Central	23	8	9	16	13	10	9	12
U.S.A.	22	8	9	17	13	10	9	12

Table 6. Gender and Racial Composition of Visitors by Site, Compared to the States and the U. S. A.

State/Site	Gender/Racial Composition (Percent)				
	Males	Native American	Asian/ Pacific Island	Black	White
Florida					
Hugh Taylor Birch SRA	48.00	<1	<1	14	84
Coral Reef State Park	52.08	<1	<1	2	95
Honeymoon Island SRA	51.98	<1	1	<1	96
Everglades National Park	43.02	0	<1	0	99
	54.32	0	1	<1	96
Texas					
Goose Island SRA	49.20	<1	1	12	79
Padre Island National Seashore	52.29	<1	1	0	86
	54.41	<1	2	1	90
All Sites	51.54	<1	1	<1	94
South Atlantic	48.40	<1	<1	21	78
West South Central	48.90	1	<1	15	79
East North Central	48.40	<1	<1	20	80
U.S.A.	48.60	1	2	12	83

Table 7. Distribution of Visitors by Highest Education Level Attained, by Site

State/Site	Education Levels (Percent completed)				
	8th Grade or Less	9th-11th Grade	High School Graduate	13-15 Years	College Graduate
Florida					
Hugh Taylor Birch SRA	7.8	6.9	30.8	22.6	16.7
Coral Reef State Park	8.7	4.7	23.5	19.1	21.9
Honeymoon Island SRA	9.3	4.8	26.1	28.4	22.9
Everglades National Park	7.7	5.1	27.9	20.1	19.2
Texas					
Goose Island SRA	18.7	9.1	25.6	21.0	15.5
Padre Island National Seashore	10.4	5.9	26.8	23.0	18.7
All Sites	10.7	6.2	26.6	22.1	19.1
					15.3

Table 8. Distribution of Family Income of Visitors by Site, Compared to the States and the U.S.A.

State/Site	Family Income Before Taxes (Percent)					
	Less Than \$10,000	\$10,000- 19,999	\$20,000- 29,999	\$30,000- 39,999	\$40,000- 49,999	\$50,000 and over
Florida	33	32	19	8	3	4
Hugh Taylor Birch SRA	4	14	24	15	19	24
Coral Reef State Park	5	10	13	21	15	36
Honeymoon Island SRA	4	18	23	18	18	19
Everglades National Park	5	16	18	15	16	31
Texas	30	29	21	11	4	5
Goose Island SRA	3	17	22	20	18	20
Padre Island National Seashore	6	18	20	20	12	24
All Sites	5	15	20	18	16	26
South Atlantic	37	31	19	8	3	3
West South Central	32	29	20	10	4	4
East North Central	37	31	19	8	3	3
U.S.A.	29	29	22	11	4	5

Table 9. Distribution of Visitors by Group Size

State/Site	Average Group Size	Group Size (Percent of total)			
		One	Two	Three-Four	Five and Up
Florida					
Hugh Taylor Birch SRA	2.68	24.4	45.0	19.0	11.6
Coral Reef State Park	2.89	3.1	55.1	30.3	11.5
Honeymoon Island SRA	2.38	19.2	51.2	24.4	5.2
Everglades National Park	3.21	4.6	58.8	26.9	9.7
Texas					
Goose Island SRA	4.24	1.5	50.6	27.2	20.7
Padre Island National Seashore	2.87	8.0	58.5	21.2	12.3
All Sites	3.04	10.3	53.2	24.8	11.7

Table 10. Distribution of Visitors by Group Type

State/Site	Group Type (Percent)					
	Family	More than One Family	Friends and Family	Friends	Organized Group	One Person
Florida						
Hugh Taylor Birch SRA	47.4	2.2	5.1	19.0	1.1	24.9
Coral Reef State Park	69.4	3.4	3.1	21.2	0.0	2.9
Honeymoon Island SRA	65.8	1.4	8.0	5.5	0.0	19.3
Everglades National Park	70.6	2.7	4.9	16.7	0.5	4.6
Texas						
Goose Island SRA	82.6	3.9	4.8	5.1	1.5	2.1
Padre Island National Seashore	67.9	4.0	4.6	15.2	0.3	7.7
All Sites	67.1	2.9	5.1	13.9	0.6	10.3
						0.1

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Table 11. Average Annual Number of Days on Site and Trips to the Site, and the Average Length of Stay on Site for the Interview Trip

State/Site	Annual		Interview Trip	
	Days	Trips	Days	% Single Day Trips
Florida				
Hugh Taylor Birch SRA	17.80	17.37	1.21	96.7
Coral Reef State Park	3.51	1.45	2.98	43.1
Honeymoon Island SRA	29.09	29.89	1.51	94.0
Everglades National Park	3.65	2.06	1.98	62.3
Texas				
Goose Island SRA	8.00	4.05	3.10	32.3
Padre Island National Seashore	11.54	4.79	5.90	26.9
All Sites	12.25	9.94	2.75	59.8

Table 12a. Ranking of the Top Ten Main Activities of Visitors Age 16 and Older*

Activities	Sites (Rank and Percent)													
	All Sites Rank	%	Hugh Taylor Birch SRA Rank	%	Coral Reef State Park Rank	%	Honeymoon Island SRA Rank	%	Everglades National Park Rank	%	Goose Island SRA Rank	%	Padre Island National Seashore Rank	%
Sunbathing	1	12.7	2	18.0	9	1.7	1	53.5	16	0.3	-	0.0	9	2.9
Developed Camping	2	12.1	-	0.0	3	13.7	-	0.0	14	0.5	1	47.1	3	14.3
Sightseeing	3	12.0	6	5.2	4	10.9	-	0.0	1	36.2	9	1.2	4	12.2
Saltwater Fishing	4	6.5	13	1.1	6	3.1	10	0.6	4	10.8	2	13.6	5	10.5
Walking	5	6.5	1	29.2	-	0.0	4	6.4	16	0.3	10	0.6	11	1.5
Wildlife Observation	6	5.5	10	1.9	8	2.3	9	0.9	2	17.0	3	8.8	10	1.7
Primitive Camping	7	5.5	-	0.0	-	0.0	-	0.0	3	12.2	5	5.7	2	14.9
Observational Diving	8	4.6	-	0.0	1	27.4	-	0.0	-	0.0	-	0.0	-	0.0
No Main Activity	9	4.5	17	0.3	5	6.0	3	11.0	7	1.9	7	3.0	7	5.0
Other Boating	10	3.9	15	0.5	2	21.4	-	0.0	9	1.4	-	0.0	-	0.0

*After the person interviewed indicated all the activities for which they participated, they were asked which if any, was there main activity.

Table 12b. Ranking of the Top 15 Activities of Visitors of All Ages

Activities	Sites (Rank and Percent)													
	All Sites Rank	All Sites %	Hugh Taylor Birch SRA Rank	Hugh Taylor Birch SRA %	Coral Reef State Park Rank	Coral Reef State Park %	Honeymoon Island SRA Rank	Honeymoon Island SRA %	Everglades National Park Rank	Everglades National Park %	Goose Island SRA Rank	Goose Island SRA %	Padre National Seashore Rank	Padre National Seashore %
Sightseeing	1	67.5	2	64.6	1	84.0	6	21.2	1	82.0	3	74.8	1	70.7
Walking	2	66.0	1	72.1	3	69.8	2	54.7	3	48.0	2	87.5	2	63.7
Picnicking	3	50.4	4	47.2	4	69.5	4	27.5	6	40.2	4	67.3	4	47.3
Sunbathing	4	49.8	3	61.1	6	62.3	1	86.8	13	21.7	18	18.4	3	56.0
Observing Wildlife	5	43.3	11	22.9	7	59.8	9	9.2	2	68.9	5	51.7	8	38.9
Driving for Pleasure	6	35.1	6	30.9	9	50.6	10	7.4	9	32.0	8	41.5	7	44.2
Developed Camping	7	33.5	-	0.0	5	62.9	21	1.7	29	3.3	1	92.9	11	30.2
Visiting Museums	8	33.4	10	23.4	2	83.4	22	1.3	4	45.4	19	13.2	13	26.6
Other Nature Study	9	29.0	9	24.9	12	37.1	11	6.8	5	41.3	11	29.0	10	30.5
Photography	10	24.7	14	17.3	11	40.6	14	4.6	8	33.0	13	22.7	14	25.8
Hiking	11	24.6	13	20.6	16	29.6	16	4.4	12	22.8	9	34.7	9	32.8
Other Outdoor Swimming	12	24.5	5	36.4	8	53.3	7	19.1	22	6.8	25	5.8	12	26.6
Reading Historic Markers	13	24.0	9	30.3	10	41.0	23	1.2	10	31.5	20	12.8	15	23.3
Collecting Seashells	14	20.5	16	11.8	21	14.9	3	36.5	20	7.6	21	10.3	6	44.9
Self-Guided Trail	15	21.9	8	29.0	13	36.9	15	4.6	11	23.6	16	18.8	17	16.2

Table 13. Average Daily On-site Fees and Trip Expenditures Per Person

State/Site	On-site Fees (\$)	% Interviewed That Paid Fees	Average Trip Expenditures Per Person
Florida			
Hugh Taylor Birch SRA	1.52	53.4	583.30
Coral Reef State Park	25.98	99.4	840.75
Honeymoon Island SRA	2.18	92.1	238.53
Everglades National Park	6.76	37.7	652.45
Texas			
Goose Island SRA	8.09	86.7	527.12
Padre Island National Seashore	3.13	74.7	566.15
All Sites	8.20	73.0	579.67

Table 14. Maximum Willingness- to-Pay For an Annual Vehicle Pass for the Interview Site Versus Any Site the Agency Manages

State/Site	Interview Site* (\$)			Any Site Agency Manages (\$) **		
	Mean	Std Error	N	Mean	Std Error	N
Florida						
Hugh Taylor Birch SRA	14.68	3.47	105	21.28	3.50	113
Coral Reef State Park	5.74	0.79	172	16.99	3.00	168
Honeymoon Island SRA	17.75	1.39	142	22.22	1.50	141
Everglades National Park	7.12	0.85	171	15.24	1.33	167
Texas						
Goose Island SRA	6.58	1.00	140	16.15	1.80	141
Padre Island National Seashore	7.65	0.93	134	15.79	1.36	132
All Sites	9.50	0.59	864	17.75	0.90	862

*Pass would admit all persons in the vehicle at the interview site only and is good for one year.

**Pass would admit all persons in the vehicle to any site the agency manages and is good for one year.

Table 15. Willingness-to-Pay Randomly Assigned Dollar Amounts - On-site Survey

State/Site	Dollars Per Person Per Day(Percent Yes)*									
	1.00	2.00	5.00	7.50	10.00	12.50	15.00	25.00	50.00	75.00
Florida										
Hugh Taylor Birch SRA	66.7	57.1	42.9	11.4	7.9	5.9	5.3	0.0	0.0	5.7
Coral Reef State Park	75.0	41.2	28.6	14.3	0.0	5.7	5.7	0.0	2.9	0.0
Honeymoon Island SRA	100.0	75.8	41.2	9.4	13.9	5.7	2.9	6.2	0.0	0.0
Everglades National Park	97.4	80.0	59.5	28.6	18.2	17.6	14.3	2.7	2.7	0.0
Texas										
Goose Island SRA	77.1	62.1	17.6	3.0	3.1	6.2	3.1	0.0	0.0	0.0
Padre Island National Seashore	85.3	75.8	50.0	33.3	14.7	8.6	11.1	5.7	0.0	0.0
All Sites	83.3	63.1	39.2	16.5	9.4	8.1	7.0	2.4	1.0	1.0

*Toned areas show dollar amounts for which a majority (i.e., 50% or more) of those interviewed responded that they would pay the fee.

Table 16. Willingness-to-Pay For Annual Vehicle Pass to Site: Randomly Assigned Dollar Amounts - Mailback Survey

State/Site	Dollars Per Year Per Vehicle Pass (Percent Yes)*						Number of Responses
	1.00	5.00	10.00	15.00	25.00	50.00	100.00
Florida							
Hugh Taylor Birch SRA	50.0	65.0	53.8	37.5	10.0	7.1	13.3
Coral Reef State Park	58.3	73.7	28.6	28.0	17.2	9.1	0.0
Honeymoon Island SRA	93.3	84.2	84.2	71.4	52.6	22.2	8.0
Everglades National Park	88.9	58.8	48.0	16.7	13.6	5.3	9.1
Texas							
Goose Island SRA	72.0	61.1	40.0	30.4	15.0	6.7	4.2
Padre Island National Seashore	87.0	64.7	42.1	23.5	36.8	0.0	0.0
All Sites	74.7	66.9	49.1	34.1	24.4	8.6	5.4

*Toned areas show dollar amount for which a majority (i.e., 50% or more) of those interviewed responded that they would buy the pass.

Table 17. Satisfaction Ratings for Recreation Experience at the Site

State/Site	Mean	Standard Error	N	Rating (Percent)											
				0	1	2	3	4	5	6	7	8	9	10	
Florida															
Hugh Taylor Birch SRA	7.27	.22	107	0.9	0.0	4.7	1.0	4.7	11.2	9.3	13.1	26.2	6.5	22.4	
Coral Reef State Park	8.00	.14	168	0.6	0.6	0.0	1.2	1.8	5.9	9.5	11.9	22.7	20.2	25.6	
Honeymoon Island SRA	7.13	.19	129	0.8	0.0	2.3	3.1	3.1	17.8	9.3	12.4	20.9	14.0	16.3	
Everglades National Park	7.81	.16	165	1.2	0.6	0.6	1.8	2.4	10.3	4.9	13.9	22.7	11.2	30.4	
Texas															
Goose Island SRA	7.96	.15	141	0.0	0.0	0.7	1.4	2.1	9.9	5.7	14.9	21.3	15.6	28.4	
Padre Island National Seashore	7.85	.20	129	0.0	0.0	3.9	3.1	1.5	11.6	5.4	5.4	22.5	11.6	35.0	

28 Table 18. Satisfaction Ratings - Number of Other Visitors at the Site

State/Site	Mean	Standard Error	N	Rating (Percent)										
				0	1	2	3	4	5	6	7	8	9	10
Florida														
Hugh Taylor Birch SRA	8.37	.18	108	1.1	8.0	12.5	4.6	8.0	13.6	7.9	7.9	12.5	2.3	21.6
Coral Reef State Park	6.38	.22	157	1.3	7.0	6.4	5.7	1.9	13.4	7.0	8.9	22.9	15.9	9.6
Honeymoon Island SRA	5.78	.26	120	2.5	8.3	8.3	5.0	4.2	19.2	7.5	10.0	15.8	7.5	11.7
Everglades National Seashore	6.54	.23	151	2.0	4.0	5.0	4.0	5.0	19.2	7.3	9.9	11.1	11.3	21.2
Texas														
Goose Island SRA	6.66	.27	118	3.4	3.4	6.8	5.9	1.0	13.6	6.8	10.3	17.0	9.3	22.9
Padre Island National Seashore	6.12	.25	118	3.4	0.9	7.6	5.9	5.1	22.9	9.3	7.6	17.0	4.2	16.1

Table 19. Satisfaction Ratings on Cleanliness of Facilities

State/Site	Standard		Rating (Percent)											
	Mean	Error	N	0	1	2	3	4	5	6	7	8	9	10
Florida														
Hugh Taylor Birch SRA	8.37	.18	108	0.0	0.9	0.0	1.9	1.9	6.5	4.0	8.3	22.2	13.9	41.0
Coral Reef State Park	8.09	.16	170	0.6	2.4	1.2	0.6	1.8	3.5	3.5	14.1	23.5	18.2	30.6
Honeymoon Island SRA	7.76	.21	131	0.8	1.5	3.1	2.3	3.8	9.9	5.3	3.8	19.1	18.3	32.1
Everglades National Park	8.30	.13	166	0.0	0.0	0.6	1.8	1.8	6.0	4.3	7.2	25.3	21.7	31.3
Texas														
Goose Island SRA	8.47	.13	140	0.0	0.0	0.0	0.7	1.4	3.0	4.3	16.4	20.7	16.4	37.1
Padre Island National Seashore	7.30	.21	130	0.8	0.8	3.9	4.6	5.4	10.0	4.6	13.1	19.0	13.9	23.9

Table 20. Satisfaction Ratings on Parking

State/Site	Mean	Standard Error	N	Rating (Percent)										
				0	1	2	3	4	5	6	7	8	9	10
Florida														
Hugh Taylor Birch SRA	8.26	.25	105	1.0	1.9	3.8	2.9	2.9	5.0	1.0	7.6	6.7	15.2	52.4
Coral Reef State Park	8.72	.11	166	0.0	0.0	0.6	0.0	1.2	3.0	3.0	8.4	21.1	21.1	41.6
Honeymoon Island SRA	8.69	.16	134	0.0	0.8	0.8	0.0	1.5	6.7	3.7	6.0	13.4	15.7	51.4
Everglades National Park	8.72	.13	165	0.6	0.0	0.0	1.2	1.2	4.9	3.0	6.1	17.0	17.6	48.4
Texas														
Goose Island SRA	8.92	.11	140	0.0	0.0	0.0	0.0	0.7	2.1	5.0	7.1	18.7	14.3	52.1
Padre Island National Seashore	7.48	.23	131	3.1	1.5	3.0	2.3	3.8	13.0	0.8	6.9	20.6	13.7	31.3

Table 21. Satisfaction Ratings on Water Quality

State/Site	Standard		N	Rating (Percent)											
	Mean	Error		0	1	2	3	4	5	6	7	8	9	10	
Florida															
Hugh Taylor Birch SRA	7.41	.28	90	3.3	1.1	3.3	3.3	1.1	12.2	4.4	15.8	11.1	11.1	33.3	
Coral Reef State Park	7.60	.19	161	3.7	0.6	1.2	2.0	2.5	8.7	6.2	6.8	28.6	13.0	26.7	
Honeymoon Island SRA	7.74	.20	126	0.8	0.8	0.0	3.2	4.0	10.3	7.9	11.1	18.3	11.1	32.5	
Everglades National Park	7.96	.16	150	0.7	0.7	1.3	0.7	2.7	8.0	4.7	12.0	23.3	18.7	27.2	
Texas															
Goose Island SRA	8.02	.17	135	0.7	0.0	0.0	2.2	2.2	8.1	5.2	13.4	24.4	11.1	32.7	
Padre Island National Seashore	6.90	.28	116	7.8	1.7	2.6	2.6	4.3	11.2	5.2	7.0	22.4	9.5	25.9	

Table 22. Satisfaction Ratings on Overall Condition of the Site

State/Site	Standard		N	Rating (Percent)											
	Mean	Error		0	1	2	3	4	5	6	7	8	9	10	
Florida															
Hugh Taylor Birch SRA	8.19	.17	108	0.0	0.9	0.9	0.9	1.9	4.6	3.7	12.0	27.8	17.7	29.6	
Coral Reef State Park	7.85	.14	168	0.6	0.6	1.2	1.2	1.8	4.7	6.0	16.0	28.0	23.2	16.7	
Honeymoon Island SRA	7.00	.19	134	1.5	2.2	0.8	3.7	1.5	18.0	6.7	17.1	20.1	15.7	12.7	
Everglades National Park	8.60	.10	165	0.0	0.0	0.0	0.0	1.2	3.0	3.6	9.7	25.0	24.2	33.3	
Texas															
Goose Island SRA	8.58	.12	142	0.0	0.0	0.0	0.7	0.7	3.5	3.5	8.5	27.5	20.4	35.2	
Padre Island National Seashore	7.56	.20	131	0.0	0.8	3.8	3.1	2.3	11.5	8.5	6.1	22.1	17.7	24.4	

APPENDIX

A. Site Profiles - NOAA Inventory of Public Recreation Areas and Facilities in Coastal Areas.

NOAA INVENTORY OF PUBLIC OUTDOOR RECREATION AREAS AND FACILITIES IN COASTAL AREAS, FY 1984

SITE NAME: HUGH TAYLOR BIRCH STATE RECREATION AREA

MANAGING AGENCY: FL PARKS & RECREATION

LATITUDE - LONGITUDE: 2608N08006W

1984 ACREAGE BY COASTAL COUNTY *

COUNTY ACRES
BROWARD 180

TYPE OF AREA

ACREAGE

	LAND	WATER	TOTAL
ADJACENT TO OR INCLUDING A BODY OF WATER	180	0	180
ADJACENT TO BODIES OF WATER UNDER TIDAL INFLUENCES	180	0	180
ADJACENT TO OPEN OCEAN WATERS	180	0	180
OFFSHORE	180	0	180
ON BARRIER ISLAND	180	0	180
ON OPEN OCEAN ISLAND	180	0	180
ON ESTUARY/EMBAYMENT ISLAND	180	0	180
ON UNCLASSIFIED ISLAND	180	0	180

* 0 PERCENT OF THE 1984 ACREAGE IS IN NONCOASTAL COUNTIES.

INVENTORY OF FACILITIES

BUDGET & PERSONNEL

		EXPENDITURES	REVENUE	PERSONNEL
ARTIFICIAL REEFS	0	CAPITAL (\$)	OPERATING (\$)	(FTE)
FISHING PIERS	0	21539	367971	118282
BOAT RAMPS	0	24800	305067	141486
BOAT SLIPS	0	B	B	13.0
BOAT DOCKS (WITHOUT SLIPS)	0	B	B	B
CAMP SITES (RV AND TENT)	6			
RECREATIONAL SHELLFISH BEDS	0			
HUNTING/GAME MANAGEMENT AREA	0			
CONSERVATION/SCENIC AREA	0			
BEACH	400			
TRAILS	4			
OUTDOOR SWIMMING POOLS	0			
PICNIC TABLES	231			
GOLF COURSES	0			
DRIVING RANGES	0			
OUTDOOR COURTS	0			
FIELD SPORT AREAS	0			
PARKING SPACES AT HISTORICAL/CULTURAL SITES	0			
PARKING SPACES AT ALL OTHER SITES	0			

USER DAYS - ATTENDANCE

1984	283403
1982	511274
1977	629282
1972	B

MISSING INFORMATION CODES

- A = SITE DID NOT EXIST
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- E = AGENCY LOST RECORDS
- F = SATELLITE PARK - DATA IN OTHER PARK
- G = LATITUDE - LONGITUDE NOT FOUND

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NOAA INVENTORY OF PUBLIC OUTDOOR RECREATION AREAS AND FACILITIES IN COASTAL AREAS, FY 1984

SITE NAME: CORAL REEF STATE PARK
 MANAGING AGENCY: FL PARKS & RECREATION
 LATITUDE - LONGITUDE: 2513N08017W

1984 ACREAGE BY COASTAL COUNTY *
 COUNTY ACRES
 MONROE 55067

TYPE OF AREA

ADJACENT TO OR INCLUDING A BODY OF WATER YES
 ADJACENT TO BODIES OF WATER UNDER TIDAL INFLUENCES YES
 ADJACENT TO OPEN OCEAN WATERS YES
 OFFSHORE NO
 ON BARRIER ISLAND NO
 ON OPEN OCEAN ISLAND NO
 ON ESTUARY/EMBAYMENT ISLAND NO
 ON UNCLASSIFIED ISLAND NO

ACREAGE

	LAND	WATER	TOTAL
1984	52727	2340	55067
1982	52727	2340	55067
1977	52672	2340	55012
1972	52672	2340	55012

* 0 PERCENT OF THE 1984 ACREAGE IS IN NONCOASTAL COUNTIES.

INVENTORY OF FACILITIES

	#	ACRES	LINEAR FT	MILES
ARTIFICIAL REEFS	0			
FISHING PIERS	0			
BOAT RAMPS	4			
BOAT SLIPS	42			
BOAT DOCKS (WITHOUT SLIPS)	0			
CAMP SITES (RV AND TENT)	47			
RECREATIONAL SHELLFISH BEDS	0			
HUNTING/GAME MANAGEMENT AREA	0			
CONSERVATION/SCENIC AREA	0			
BEACH	950			
TRAILS	1			
OUTDOOR SWIMMING POOLS	0			
PICNIC TABLES	101			
GOLF COURSES	0			
DRIVING RANGES	0			
OUTDOOR COURTS	0			
FIELD SPORT AREAS	0			
PARKING SPACES AT HISTORICAL/CULTURAL SITES	0			
PARKING SPACES AT ALL OTHER SITES	B			

BUDGET & PERSONNEL

	EXPENDITURES	REVENUE	PERSONNEL
CAPITAL (\$)	53691	574184	(FTE)
OPERATING (\$)	175256	357739	19.0
1984	B	B	22.0
1982	B	B	16.0
1977	B	B	B
1972	B	B	B

USER DAYS - ATTENDANCE

	1984	1982	1977	1972
599012				
465463				
410939				
B				

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NOAA INVENTORY OF PUBLIC OUTDOOR RECREATION AREAS AND FACILITIES IN COASTAL AREAS, FY 1984

SITE NAME: EVERGLADES NATIONAL PARK
 MANAGING AGENCY: NATIONAL PARK SERVICE
 LATITUDE - LONGITUDE: 2547N08038W

1984 ACREAGE BY COASTAL COUNTY *
 COUNTY ACRES
 COLLIER, FL 39273
 DADE, FL 415716
 MONROE, FL 943674
 , , ,
 , , ,

TYPE OF AREA	ACREAGE		YES
	LAND	WATER	
ADJACENT TO OR INCLUDING A BODY OF WATER	448653	950000	YES
ADJACENT TO BODIES OF WATER UNDER TIDAL INFLUENCES	448581	950000	YES
ADJACENT TO OPEN OCEAN WATERS	448506	950000	YES
OFFSHORE	448506	950000	YES
ON BARRIER ISLAND	448506	950000	NO
ON OPEN OCEAN ISLAND			YES
ON ESTUARY/EMBAYMENT ISLAND			NO
ON UNCLASSIFIED ISLAND			NO

* 0 PERCENT OF THE 1984 ACREAGE IS IN NONCOASTAL COUNTIES.

INVENTORY OF FACILITIES

	#	ACRES	LINEAR FT	MILES
ARTIFICIAL REEFS	0			
FISHING PIERS	0			
BOAT RAMPS	3			
BOAT SLIPS	50			
BOAT DOCKS (WITHOUT SLIPS)	2			
CAMP SITES (RV AND TENT)	425			
RECREATIONAL SHELLFISH BEDS	0			
HUNTING/GAME MANAGEMENT AREA	1399E3			
CONSERVATION/SCENIC AREA	79200			
BEACH	105			
TRAILS	1			
OUTDOOR SWIMMING POOLS	450			
PICNIC TABLES	0			
GOLF COURSES	0			
DRIVING RANGES	0			
OUTDOOR COURTS	0			
FIELD SPORT AREAS	0			
PARKING SPACES AT HISTORICAL/CULTURAL SITES	400			
PARKING SPACES AT ALL OTHER SITES	390			

BUDGET & PERSONNEL		REVENUE		PERSONNEL	
EXPENDITURES		CAPITAL (\$)		OPERATING (\$)	
1984	0	1984	0	1984	366142
1982	0	1982	0	1982	369192
1977	1426000	1977	B	1977	416307
1972	179000	1972	B	1972	B
					B

USER DAYS - ATTENDANCE

1984	626700
1982	550200
1977	947956
1972	1574323

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 E = AGENCY LOST RECORDS
 F = WHITE PARK - DATA IN OTHER PARK

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NOAA INVENTORY OF PUBLIC OUTDOOR RECREATION AREAS AND FACILITIES IN COASTAL AREAS, FY 1984

SITE NAME: HONEYMOON ISLAND STATE RECREATION AREA

1984 ACREAGE BY COASTAL COUNTY *

MANAGING AGENCY: FL PARKS & RECREATION

COUNTY PINELLAS
ACRES 2808

LATITUDE - LONGITUDE: 2804N08249W

TYPE OF AREA

ADJACENT TO OR INCLUDING A BODY OF WATER	.	.	.
ADJACENT TO BODIES OF WATER UNDER TIDAL INFLUENCES	.	.	.
ADJACENT TO OPEN OCEAN WATERS.	.	.	.
OFFSHORE	.	.	.
ON BARRIER ISLAND	.	.	NO
ON OPEN OCEAN ISLAND	.	.	NO
ON ESTUARY/EMBAYMENT ISLAND	.	.	NO
ON UNCLASSIFIED ISLAND	.	.	NO

ACREAGE

	LAND	WATER	TOTAL
1984	408	2400	2808
1982	408	2400	2808
1977	408	1385	1793
1972	A	A	A

* 0 PERCENT OF THE 1984 ACREAGE IS IN NONCOASTAL COUNTIES.

INVENTORY OF FACILITIES

[illegible]

BUDGET & PERSONNEL

	EXPENDITURES		REVENUE	PERSONNEL
	CAPITAL (\$)	OPERATING (\$)	\$	(FTE)
1984	499626	241607	37094	13.0
1982	807424	84747	11647	7.0
1977	B	B	0	0.0
1972	A	A	0	0.0

USER DAYS - ATTENDANCE

1984	1767819
1982	957116
1977	B
1972	A

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E = AGENCY LOST RECORDS
F = SATELLITE PARK - DATA IN OTHER PARK
G = LATITUDE - LONGITUDE NOT FOUND

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NOAA INVENTORY OF PUBLIC OUTDOOR RECREATION AREAS AND FACILITIES IN COASTAL AREAS, FY 1984

SITE NAME: GOOSE ISLAND STATE PARK

MANAGING AGENCY: TEXAS PARKS

LATITUDE - LONGITUDE: 2808N09659W

1984 ACREAGE BY COASTAL COUNTY *

COUNTY ACRES
ARANSAS 307

TYPE OF AREA

ACREAGE

ADJACENT TO OR INCLUDING A BODY OF WATER	LAND	WATER	TOTAL
ADJACENT TO BODIES OF WATER UNDER TIDAL INFLUENCES	307	0	307
ADJACENT TO OPEN OCEAN WATERS	307	0	307
OFFSHORE	307	0	307
ON BARRIER ISLAND	307	0	307
ON OPEN OCEAN ISLAND	307	0	307
ON ESTUARY/EMBAYMENT ISLAND	307	0	307
ON UNCLASSIFIED ISLAND	307	0	307

* 0 PERCENT OF THE 1984 ACREAGE IS IN NONCOASTAL COUNTIES.

INVENTORY OF FACILITIES

BUDGET & PERSONNEL

FACILITY	#	ACRES	LINEAR FT	MILES
ARTIFICIAL REEFS	0			
FISHING PIERS	1			
BOAT RAMPS	1			
BOAT SLIPS	0			
BOAT DOCKS (WITHOUT SLIPS)	1			
CAMP SITES (RV AND TENT)	127			
RECREATIONAL SHELLFISH BEDS	0			
HUNTING/GAME MANAGEMENT AREA	307			
CONSERVATION/SCENIC AREA	2500			
BEACH	1			
TRAILS	0			
OUTDOOR SWIMMING POOLS	29			
PICNIC TABLES	0			
GOLF COURSES	0			
DRIVING RANGES	0			
OUTDOOR COURTS	0			
FIELD SPORT AREAS	0			
PARKING SPACES AT HISTORICAL/CULTURAL SITES	20			
PARKING SPACES AT ALL OTHER SITES	50			

CAPITAL (\$)	OPERATING (\$)	REVENUE	PERSONNEL (FTE)
1984 47154	245821	180872	12.0
1982 11487	230349	155265	11.0
1977 5435	116521	88554	7.0
1972 22300	58537	45663	4.0

USER DAYS - ATTENDANCE

1984	432743
1982	319360
1977	302236
1972	159262

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NOAA INVENTORY OF PUBLIC OUTDOOR RECREATION AREAS AND FACILITIES IN COASTAL AREAS, FY 1984

SITE NAME: PADRE ISLAND NATIONAL SEASHORE

MANAGING AGENCY: NATIONAL PARK SERVICE

LATITUDE - LONGITUDE: 2650N09722W

1984 ACREAGE BY COASTAL COUNTY *

COUNTY	ACRES
KENEDY, TX	88669
KLEBERG, TX	36127
WILLACY, TX	5559

TYPE OF AREA

ACREAGE

ADJACENT TO OR INCLUDING A BODY OF WATER	YES
ADJACENT TO BODIES OF WATER UNDER TIDAL INFLUENCES	YES
ADJACENT TO OPEN OCEAN WATERS	YES
OFFSHORE	YES
ON BARRIER ISLAND	NO
ON OPEN OCEAN ISLAND	NO
ON ESTUARY/EMBAYMENT ISLAND	YES
ON UNCLASSIFIED ISLAND	NO

LAND	WATER	TOTAL
1984 111673	18682	130355
1982 111673	18682	130355
1977 117236	18682	35918
1972 117236	18682	135918

* 0 PERCENT OF THE 1984 ACREAGE IS IN NONCOASTAL COUNTIES.

INVENTORY OF FACILITIES

BUDGET & PERSONNEL

	#	ACRES	LINEAR FT	MILES
ARTIFICIAL REEFS	0			
FISHING PIERS	0			
BOAT RAMPS	1			
BOAT SLIPS	0			
BOAT DOCKS (WITHOUT SLIPS)	0			
CAMP SITES (RV AND TENT)	42			
RECREATIONAL SHELLFISH BEDS	0			
HUNTING/GAME MANAGEMENT AREA	130180			
CONSERVATION/SCENIC AREA	345840			
BEACH	1			
TRAILS	0			
OUTDOOR SWIMMING POOLS	0			
PICNIC TABLES	80			
GOLF COURSES	0			
DRIVING RANGES	0			
OUTDOOR COURTS	0			
FIELD SPORT AREAS	0			
PARKING SPACES AT HISTORICAL/CULTURAL SITES	0			
PARKING SPACES AT ALL OTHER SITES	1000			

CAPITAL (\$)	OPERATING (\$)	REVENUE	PERSONNEL (FTE)
1984 131000	1108200	25905	36.6
1982 B	987400	27290	34.0
1977 B	B	26355	B
1972 B	B	B	B

USER DAYS - ATTENDANCE

YEAR	ATTENDANCE
1984	613400
1982	731200
1977	836234
1972	877511

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